



Kawasaki

Ninja ZX-9R

Motorcycle Service Manual

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The right is reserved to make changes at any time without prior notice and without incurring an obligation to make such changes to products manufactured previously. See your dealer for the latest information on product improvements incorporated after this publication.

All information contained in this publication is based on the latest product information available at the time of publication. Illustrations and photographs in this publication are intended for reference use only and may not depict actual model component parts.

Quick Reference Guide

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Engine Top End	4
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This quick reference guide will assist you in locating a desired topic or procedure.

- Bend the pages back to match the black tab of the desired chapter number with the black tab on the edge at each table of contents page.
- Refer to the sectional table of contents for the exact pages to locate the specific topic required.

Foreword

This manual is designed primarily for use by trained mechanics in a properly equipped shop. However, it contains enough detail and basic information to make it useful to the owner who desires to perform his own basic maintenance and repair work. A basic knowledge of mechanics, the proper use of tools, and workshop procedures must be understood in order to carry out maintenance and repair satisfactorily. Whenever the owner has insufficient experience or doubts his ability to do the work, all adjustments, maintenance, and repair should be carried out only by qualified mechanics.

In order to perform the work efficiently and to avoid costly mistakes, read the text, thoroughly familiarize yourself with the procedures before starting work, and then do the work carefully in a clean area. Whenever special tools or equipment are specified, do not use makeshift tools or equipment. Precision measurements can only be made if the proper instruments are used, and the use of substitute tools may adversely affect safe operation.

For the duration of the warranty period, we recommend that all repairs and scheduled maintenance be performed in accordance with this service manual. Any owner maintenance or repair procedure not performed in accordance with this manual may void the warranty.

To get the longest life out of your motorcycle:

- Follow the Periodic Maintenance Chart in the Service Manual.
- Be alert for problems and non-scheduled maintenance.
- Use proper tools and genuine Kawasaki Motorcycle parts. Special tools, gauges, and testers that are necessary when servicing Kawasaki motorcycles are introduced by the Special Tool Manual. Genuine parts provided as spare parts are listed in the Parts Catalog.
- Follow the procedures in this manual carefully. Don't take shortcuts.
- Remember to keep complete records of maintenance and repair with dates and any new parts installed.

How to Use This Manual

In preparing this manual, we divided the product into its major systems. These systems became the manual's chapters. All information for a particular system from adjustment through disassembly and inspection is located in a single chapter.

The Quick Reference Guide shows you all of the product's system and assists in locating their chapters. Each chapter in turn has its own comprehensive Table of Contents.

The Periodic Maintenance Chart is located in the General Information chapter. The chart gives a time schedule for required maintenance operations.

If you want spark plug information, for example, go to the Periodic Maintenance Chart first. The chart tells you how frequently to clean and gap the plug. Next, use the Quick Reference Guide to locate the Electrical System chapter. Then, use the Table of Contents on the first page of the chapter to find the Spark Plug section.

Whenever you see these WARNING and CAUTION symbols, heed their instructions! Always follow safe operating and maintenance practices.

▲WARNING

This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.

CAUTION

This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.

General Information

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1-6 GENERAL INFORMATION

General Specifications

Items	ZX900-C1	D1
Dimensions:		
Overall length	2 050 mm, (FG)(GR)(NR)(SW) 2 115 mm	2115 mm
Overall width	720 mm	↑
Overall height	1 155 mm	↑
Wheelbase	1 415 mm	↑
Road clearance	160 mm	↑
Seat height	810 mm	↑
Dry mass	183 kg, (CA) 186 kg	↑
Curb mass: Front	107 kg (CA) 107.5 kg	185 kg
Rear	100 kg, (CA) 102.5 kg	107 kg
Fuel tank capacity	19 L	102 kg ↑
Performance:		
Minimum turning radius	3.2 m	
Engine:		
Type	4-stroke, DOHC, 4-cylinder	←
Cooling system	Liquid-cooled	←
Bore and stroke	75.0 x 50.9 mm	←
Displacement	899 mL	←
Compression ratio	11.5	←
Maximum horsepower	105 kW (143 PS) @11 000 r/min (rpm), (KR, AS) 104 kW (142 PS) @11 000 r/min (rpm) (FG) 72 kW (98 PS) @11 000 r/min (rpm), (FR) 78.2 kW (106.3 PS) @11 000 r/min (rpm) (UTAC's norm), (SW) 55 kW (75 PS) @10 000 r/min (rpm), (US) ---	(FG) 72 kW (98 PS) @11 000 r/min (rpm) (ST) 104 kW (142 PS) @11 000 r/min (rpm)
Maximum torque	101 N-m(10.3 kg-m, 73 ft-lb) @9 000 r/min (rpm), (KR, AS) 100 N-m (10.2 kg-m, 72 ft-lb) @9 000 r/min (rpm) (FG) 83 N-m (8.5 kg-m, 61 ft-lb) @9 000 r/min (rpm), (SW) 79 N-m (8.0 kg-m, 58 ft-lb) @4 000 r/min (rpm), (FR)(UK)(US) ---	(FG) 83 N-m (8.5 kg-m, 61 ft-lb) @6 000 r/min (rpm) (ST) 100 N-m (10.2 kg-m, 72 ft-lb) @9 000 r/min (rpm)
Carburetion system	Carburetors, Keihin CVKD 40 x 4	←
Starting system	Electric starter	←
Ignition system	Battery and coil (transistorized)	←
Timing advance	Electronically advanced(digital igniter)	←
Ignition timing	From 10° BTDC @1 100 r/min (rpm) to 32.5° BTDC @5 000 r/min (rpm)	←
Spark plug	NGK CR9EK or ND U27ETR	←
Cylinder numbering method	Left to right, 1-2-3-4	←
Firing order	1-2-4-3	←
Valve timing:		←
Inlet	Open	←
	Close	←
	Duration	←
Exhaust	Open	←
	Close	←
	Duration	←
	292°	←

Items	ZX900-C1	D1
Lubrication system	Forced lubrication (wet sump with cooler)	←
Engine oil:		
Grade	SE, SF or SG class	←
Viscosity	SAE10W-40, 10W-50, 20W-40, or 20W-50	←
Capacity	3.8 L	←
Drive Train:		
Primary reduction system:		
Type	Gear	←
Reduction ratio	1.714 (84/49)	←
Clutch type	Wet multi disc	←
Transmission:		
Type	6-speed, constant mesh, return shift	←
Gear ratios:		
1st	2.571 (36/14)	←
2nd	1.941 (33/17)	←
3rd	1.556 (28/18)	←
4th	1.333 (28/21)	←
5th	1.200 (24/20)	←
6th	1.095 (23/21)	←
Final drive system:		
Type	Chain drive	←
Reduction ratio	2.563 (41/16)	←
Overall drive ratio	4.811 @Top gear	←
Frame:		
Type	Tubular, diamond	←
Caster (rake angle)	24°	←
Trail	93 mm	←
Front tire: Type	Tubeless	←
Size	120/70 ZR17 (58W)	←
Rear tire: Type	Tubeless	←
Size	180/55 ZR17 (73W)	←
Front suspension:		
Type	Telescopic fork	←
Wheel travel	120 mm	←
Rear suspension:		
Type	Swingarm (uni-trak)	←
Wheel travel	130 mm	←
Brake type: Front	Dual disc	←
Rear	Single disc	←
Electrical Equipment:		
Battery	12 V 8 Ah	←
Headlight: Type	Semi-sealed beam	←
Bulb	12V60/55W (quartz-halogen),	←
Tail/brake light	12 V 5/21 W x 2, (CN)(US) 12 V 8/27 W x 2	12 V 5/21 W x 2
Alternator: Type	Three-phase AC	←
Rated output	27 A/ 14 V @5 000 r/min (rpm)	←

Specifications are subject to change without notice, and may not apply to every country.

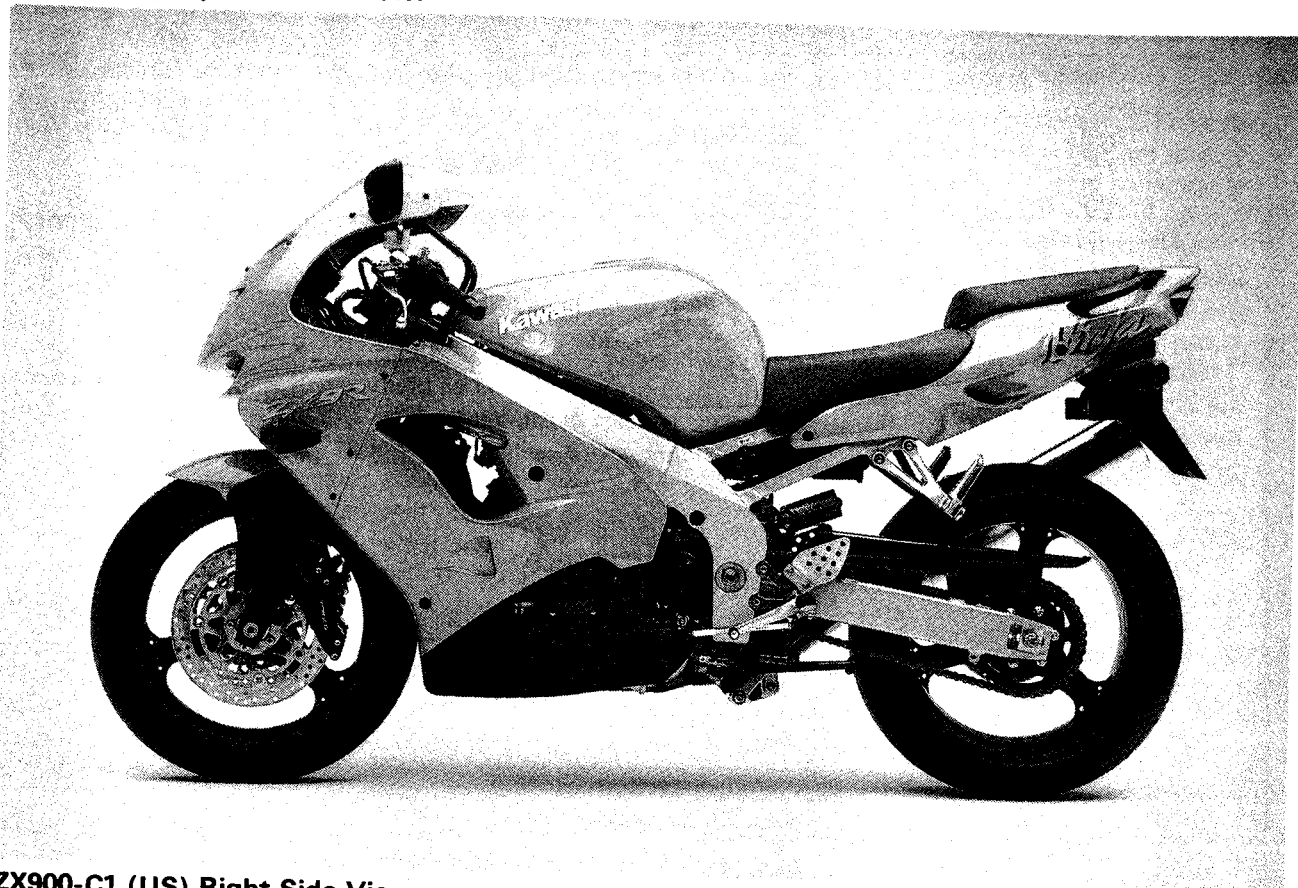
(AS) : Australian Model
 (CA) : California Model
 (FG) : German Model
 (FR) : French Model
 (GR) : Greek Model
 (KR) : Korean Model

(ST) : Swiss Model
 (SW) : Swedish Model
 (US) : U.S.A. Model
 (UK) : U.K. Model
 (NR) : Norwegian Model

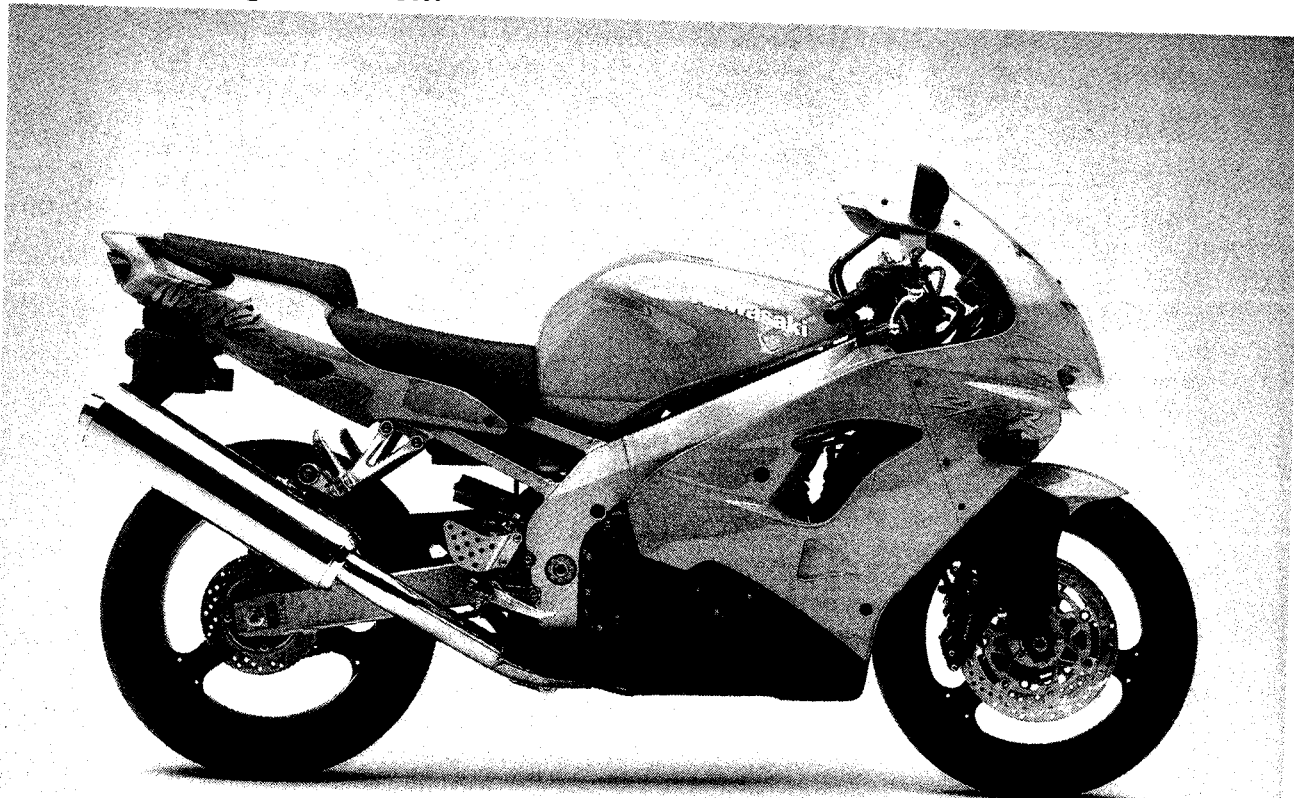
1-4 GENERAL INFORMATION

Model Identification

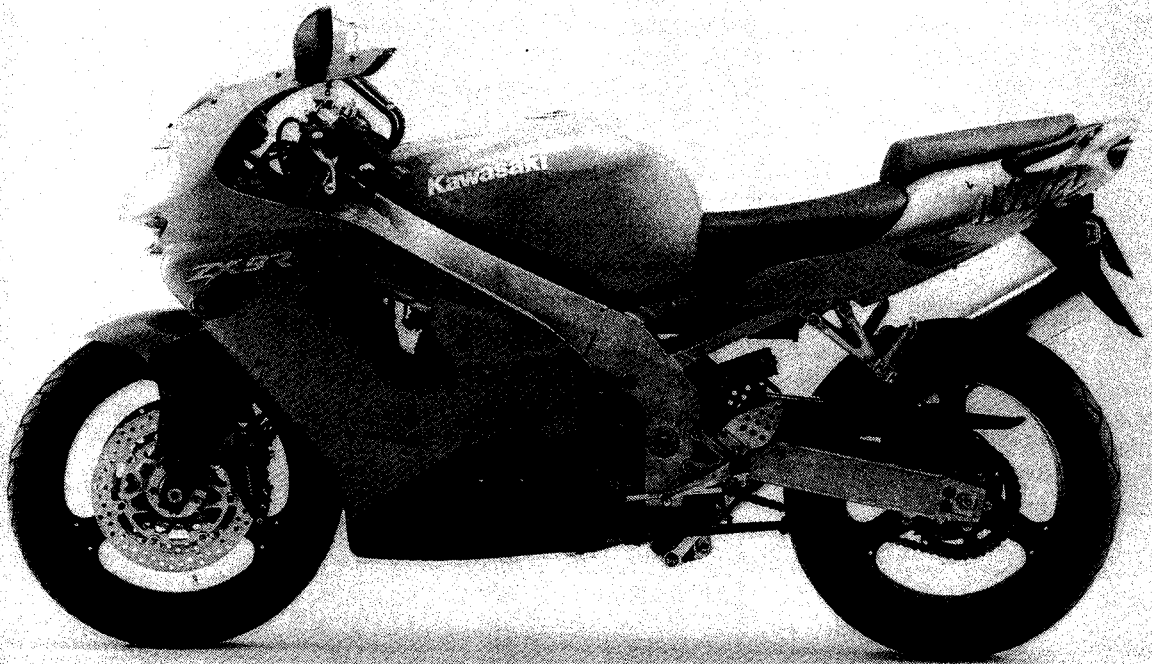
ZX900-C1 (US) Left Side View:



ZX900-C1 (US) Right Side View:



ZX900-D1 (Europe Model) Left Side View:



ZX900-D1 (Europe Model) Right Side View:

